ATTACHMENT B

Court of Customs and Patent Appeals

In re SMITH

No. 8590 Decided May 18, 1972

PATENTS

1. Board of Appeals — Procedure and practice (§19.45)

Pleading and practice in Patent Office — Rejections (§54.7)

Board is empowered under Patent Office Rule 196(b) to make new rejections; while Board should have labelled its rejection on reconsideration a new one, applicant did not seek to avail himself of rights accorded under Rule nor does he indicate any desire to further argue the rejection before Patent Office or to introduce additional evidence; accordingly, rejection is treated as before court on appeal.

2. Specification — Sufficiency of disclosure (§62.7)

Rule that disclosure of a genus and a species of a subgenus is a sufficient description of the subgenus is not consonant with description requirement of 35 U.S.C. 112; precisely how close the description must come to comply with section 112 must be left to case-by-case development; it cannot be said that subgenus is necessarily always implicitly described by a genus encompassing it and a species upon which it reads; to the extent that In re Risse, 154 USPQ 1, provides aforementioned rule for satisfaction of description requirement of first paragraph of section 112, it is overruled.

3. Claims — Broad or narrow — In general (§20.201)

There is nothing inherently wrong with a particular principle of patentability which under certain circumstances operates to defeat patentability of a narrow, but not a broader, claim, and, ordinarily, fact that under such a principle a broader claim would pass muster is no basis for adjusting principle to render narrower claim patentable.

Particular patents—Paint

Smith, Glossy Emulsion Coating Compositions Containing Surface Treated Pigments of Oilophilic Nature and Method, claims 1, 2, 12 to 18, 20, and 21 of application refused.

Appeal from Board of Appeals of the Patent Office.

Application for patent of Richard G. Smith, Serial No. 430,468, filed Feb. 4, 1965; Patent Office Group 140. From decision rejecting claims 1, 2, 12 to 18, 20, and 21, applicant appeals. Affirmed.

HERBERT B. KEIL, RICHARD L. JOHNSTON, and JOHNSTON, ROOT, O'KEEFFE, KEIL, THOMPSON & SHURTLEFF, all of Chicago, Ill., for appellant.

S. WM. COCHRAN (FRED E. MCKELVEY of counsel) for Commissioner of Patents.

Before RICH, ALMOND, BALDWIN, and LANE, Associate Judges, and RAO, Judge, United States Customs Court, sitting by designation.

LANE, Judge.

This appeal is from the decision of the Board of Appeals sustaining the examiner's rejection of claims 1, 2, 12-18, 20 and 21 of appellant's application, Serial No. 430,468, filed February 4, 1965, for "Glossy Emulsion Coating Compositions Containing Surface Treated Pigments of Oilophilic Nature and Method." This application is asserted to be a continuation of an application filed in 1956,[1] which was a continuation-in-part of a 1951 application,[2] which in turn was a continuation-in-part of Serial No. 774,897, filed September 18, 1947. We affirm the board's decision.

The Invention

The invention is directed to the compounding of a glossy water base emulsion paint. In his brief before this court, appellant distinguishes between single phase, oil base paints and dual phase, water base emulsion paints wherein there is a continuous phase of water in which globules of oil are suspended. By "oil" is meant "those natural and synthetic fluid organic water insoluble compounds commonly used as a whole or part of the vehicle or binder in coating compositions." Whereas oil base paints are said to be naturally glossy, water base emulsion paints tend to be "flat." Various advantages are claimed for water base paints, and the object of this invention was to produce a glossy water base emulsion paint.

Appellant postulates that the reason for flatness in a water base paint is "the fact that it contains two phases, the water phase preferentially wetting some of the pigment so that some pigment is contained in the volatile water phase." The concept underlying the present invention was the appreciation that "if the

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[1] Serial No. 574,988 filed March 30, 1956.
[2] Serial No. 230,841 filed June 9, 1951.

pigment used in these paints could be surface coated in such a way that it would be wholly wetted by the oil phase and not be permitted to migrate into the water phase," the problem would be solved.

The claims reflect this approach. Claims 1 and 2 are drawn to an emulsion coating composition having a continuous water phase and a discontinuous oil phase dispersed therein. The pigment is dispersed in the discontinuous oil phase and is maintained in that phase as a result of a surface coating of an organic compound which renders the pigment "oilophilic," i.e., having an affinity for oil, and particularly, having a preferential affinity for oil as compared to water. The organic compounds with which the pigment may be coated are described in the specification as follows:

> [They] are monomeric organic compounds characterized by at least one non-polar organic hydrophobic group containing at least eight carbon atoms in a hydrocarbon structure which in the form of its monocarboxylic acid is soluble in oleoresinous varnishes and insoluble in water, and at least one polar group preferably selected from the class consisting of carboxylic acids, salts of said carboxylic acids, esters of said carboxylic acids and cationic ammonium and amine surface active groups containing an ionizable negative radical of a water soluble acid. Such polar groups are effective in causing said organic compounds to adhere to the pigment surface, especially where the latter are hydrophilic.

Claim 1, subdivided for convenience, reads as follows:

> 1. An emulsion coating composition comprising essentially
> a continuous aqueous phase and
> a discontinuous water insoluble oil phase
> containing dispersed in said discontinuous phase a pigment which is surface coated with an organic compound effective to render said pigment oilophilic,
> said organic compound being a monomeric organic compound characterized by
> at least one non-polar organic hydrophobic group containing at least 8 carbon atoms in a hydrocarbon structure, which group in the form of its monocarboxylic acid is soluble in oleoresinous varnishes and insoluble in water,
> and at least one polar group,
> said organic compound adhering to said pigment surface when said coated pigment is emulsified,
> said coating having been applied to said pigment prior to emulsification thereof and prior to dispersion of said pigment in said oil phase,
> and said discontinuous pigmented phase being capable of forming a continuous solid glossy film when dried.

Claim 2 further defines the organic compound by the general formula:

$$R(\overset{\overset{O}{\parallel}}{C}\text{-}OX)_n$$

> where R is an organic radical containing 8 to 36 carbon atoms in a hydrocarbon structure, X is an inorganic cation, and n is a whole number from 1 to 2 * * *.

A series of composition claims more limited with respect to the pigment and the organic compound with which it is coated were allowed by the examiner.

The process of making the composition is also claimed. Claim 12, which is representative of the process claims on appeal, reads in pertinent part as follows:

> 12. A process of preparing emulsion coating compositions comprising essentially a continuous aqueous phase and a discontinuous water insoluble oil phase containing a pigment dispersed in said discontinuous phase which comprises surface coating a pigment with an organic compound effective to render said pigment oilophilic and adding water to said pigment, thereafter adding an oil phase and emulsifying said surface coated pigment to form a water-in-oil, pigment-in-oil emulsion and converting said water-in-oil, pigment-in-oil emulsion to a pigment-in-oil, oil-in-water emulsion * * *.

The remaining process claims, 13-18, 20 and 21, define the method in varying degrees of specificity. Several process claims limited to a specific pigment and organic compound were allowed.

The References

Baldwin [3] discloses modifying the surface energy characteristics of a pigment by "causing precipitated suspensions of water repellant metallic organic compounds to become adherent upon the surface of the pigment in the form of a thin film covering each pigment particle." Among the coating compounds disclosed are those used by appellant. The patentee was primarily concerned with improving pigments for use in a variety of systems, but specific advantages of pigments made by the disclosed method are stated to be "smoother and glossier paints * * *."

Iliff et al. (Iliff),[4] a patent issued on May 4,

[3] Patent No. 1,946,054 issued February 6, 1934.
[4] Patent No. 2,440,953.

1948, on an application filed April 11, 1944, involves aqueous emulsion coating compositions. Patentees state:

> [D]ifficulties are encountered in producing materials which produce glossy films or coatings and which possess satisfactory stability in this respect. The difficulty appears to be due to a tendency for the white pigment (titanium dioxide) to migrate from the oil phase into the external aqueous phase of the emulsion resulting in instability with respect to producing glossy films or coatings.
>
> * * *
>
> This invention therefore presents as the principal object means for producing stable white or tinted emulsion coating compositions which will produce glossy films.
>
> * * *
>
> These objects are accomplished in the present invention by incorporating, as the principal pigment in the composition, titanium dioxide which has been treated (as hereinafter described) to impart to it organophylic properties with respect to its action in the aqueous resin emulsion vehicle.

Iliff et al. refer to various methods of treating the pigments already in the prior art as of the time their application was filed which essentially involve coating the pigments with inorganic compounds, but also disclose that "other treatments which may impart organophilic properties to titanium pigments are not to be precluded from the present invention."

Cassel[5] relates to improvements in the dyeing of textile fabrics with pigments wherein the problem of pigment adherence to such fabrics is solved by the addition of controlled quantities of a "pigmented lacquer-in-water emulsion" to the fabrics. In example 3 of the Cassel patent the emulsion is prepared by forming an aqueous "pulp" of blue pigment, adding it to an alkyd resin-in-oil solution to give a water-in-lacquer emulsion, and inverting the emulsion by pouring it into an aqueous solution of sodium lauryl sulfate to give a lacquer-in-water emulsion. The solicitor summarizes this process as comprising the sequence of mixing an untreated pigment with water, adding oil to give a water-in-oil emulsion, and adding water and emulsifier to convert the water-in-oil emulsion to an oil-in-water emulsion.

The examiner additionally relied upon patents to Berry[6] and Machlin,[7] but the board dismissed these as cumulative. The solicitor agrees that they are not before us, and we do not consider their teachings.

[5] Patent No. 2,343,642 issued February 29, 1944.
[6] Patent No. 2,274,521 issued February 24, 1942.
[7] Patent No. 2,290,914 issued July 28, 1942.

The Grounds of Rejection

In its original decision, the board treated the method claims as standing or falling with the composition claims and held all of the claims on appeal to be unpatentable under 35 U.S.C. 103 over Iliff in view of Baldwin. Appellant requested reconsideration urging that the claimed method was patentably distinct from the composition and should be treated separately. The board did reconsider its position and concluded that "except for the specific pigment-coating step," Cassel, a reference previously applied by the examiner but dropped in the examiner's answer, "shows the manipulative steps of claim 12." A fair reading of the board's decision on reconsideration indicates that it was of the view that the substitution of the claimed coated pigment, believed to have been suggested by Iliff and Baldwin, for the untreated pigment used in the Cassel process would have been obvious to one of ordinary skill in the art.

[1] Appellant asserts that inasmuch as the examiner dropped Cassel, it is not before us. The difficulty with appellant's position is that the board is empowered under Patent Office Rule 196(b) to make new rejections, and we think it clearly did make a new rejection of the process claims as unpatentable under 35 U.S.C. 103 over Cassel in view of Iliff and Baldwin. While the board should have labelled its rejection on reconsideration a new one, appellant did not seek to avail himself of the rights accorded under Rule 196(b), nor does he now indicate any desire to further argue the rejection before the Patent Office or to introduce additional evidence. We accordingly treat Cassel, and the rejection in which it is relied upon, as before us. See In re Hyson, 59 CCPA ____, 453 F.2d 764, 766, 172 USPQ 399, 401 (1972); In re Cavrich, 59 CCPA ____, 451 F.2d 1091, 1093, 172 USPQ 121, 122 (1971). Giving due consideration to the time and effort which has already been expended by the parties and this court to this point in the appeal, we do not feel that justice would be served by a remand which would in all probability fail to significantly aid anyone.

Opinion

To reiterate, we have two rejections before us in this appeal. The first is the rejection of composition claims 1 and 2 under 35 U.S.C. 103 as obvious from Iliff in view of Baldwin. The other is the rejection of method claims 12-18, 20 and 21 under 35 U.S.C. 103 as obvious from Cassel in view of Iliff and Baldwin.

I. Availability of Iliff as a Reference

A threshold issue common to both rejections is the availability of Iliff as a reference. The Iliff patent was issued on May 4, 1948, on an application filed April 11, 1944. As noted above, appellant alleges that the application on appeal is in a chain of continuing applications, the earliest of which was filed on September 18, 1947, followed by one filed on June 9, 1951. During the course of prosecution of his prior applications, appellant submitted affidavits under Rule 131 purporting to prove conception and reduction to practice of the claimed invention prior to the effective date of Iliff.

The examiner attacked the sufficiency of the affidavits and also held that the 1947 application failed to support the presently claimed invention thereby depriving appellant of the right to rely upon its filing date. Since Iliff issued more than one year prior to the filing date of the 1951 application, the examiner concluded that Iliff was statutory bar and could not be overcome by a Rule 131 showing.[8] The board agreed that Iliff is a statutory bar and did not, therefore, give much consideration to the substance of the affidavit evidence. Concerning the 1947 application, the board stated:

> We find no mention in that application of the requirement that the coating compound must be a monomer having at least 8 carbon atoms in its hydrophobic moiety, and that more than one polar group was contemplated, all of which is recited in claim 1. With respect to claim 2, we find no disclosure in the above parent [1947] application of the 8 to 36 atom limitation, or the specific presence of 2 carboxylate groups in the coating compound. While the questioned limitations are consistent with the broader aspects of the parent disclosure, they could not be *specifically* claimed in the parent application. [Emphasis in original.]

Appellant asserts that the 1947 application contains a disclosure of organic coating compounds which is generic to the compounds which appear in the present claims as well as a disclosure of species upon which the subgenus of organic compounds now claimed reads. This, he argues, is sufficient for a supporting parent disclosure relying upon In re Risse, 54 CCPA 1495, 378 F.2d 948, 154 USPQ 1 (1967). He points out the following portion of the 1947 specification:

> The treatment of pigments with polar agents is not new per se and can be accomplished by several methods employing a variety of effective compounds. In general these methods involve surface coating the pigment with an oil soluble polar organic compound. Among the polar organic compounds are acidic resins, water soluble resinates, water insoluble metallic resinates, long chain fatty acids, their salts and soaps, benzene carboxylic acid and its salts, naphthenic acids and their soaps and salts, cationic active agents, e.g., alkyl amine salts and quaternary ammonium compounds containing at least 12 carbon atoms in an alkyl group or groups, e.g., lauryl pyridinium bromide, and long chain (at least 12 carbon atoms) fatty acid-containing organic Werner complexes.

Comparing this disclosure to the compounds recited in the claims on appeal, appellant contends:

> It is obvious that the surface coating organic compounds recited in the foregoing paragraph are monomeric, have a hydrocarbon structure of at least 8 carbon atoms, except for benzene carboxylic acid which contains six carbon atoms in a hydrocarbon group, and contain at least one carboxy or carboxylate group. If appellant's claims had been drawn more broadly, they would be supported by the parent application. They can be described as subgeneric claims because they delineate the invention more specifically by reciting that the organic material used to coat the pigment is monomeric, contains at least 8 carbon atoms and at least one carboxy or carboxylate group.

The principal question involved is whether or not appellant is entitled under 35 U.S.C. 120 to the benefit of the filing date of his 1947 application for the subject matter presently claimed.[9] To comply with § 120, the prior application must satisfy "the *disclosure* requirements of the first paragraph of § 112 * * * with respect to the subject matter *now*

[8] Rule 131 provides that a patent will not bar the grant of a patent to an applicant when it is proved that the invention sought to be patented was completed prior to the reference patent filing date "unless the date of such patent * * * be more than one year prior to the date on which the application was filed in this country." See 35 U.S.C. 102 (b).

[9] We note that the 1947 application was abandoned in 1951, prior to the January 1, 1953, effective date of title 35, United States Code. See Act of July 19, 1952, ch. 950, § 4, 66 Stat. 815, reproduced at 35 U.S.C. at 71. The solicitor nevertheless asserts that 35 U.S.C. 120 governs, and we agree. The 1951 application was pending in 1953, and according to the Act of July 1952, § 4, title 35 applied to pending applications. Thus, appellant can rely on 35 U.S.C. 120 for the effective date of his next preceding 1947 application if the requirements of § 120 are otherwise satisfied.

claimed." Martin v. Johnson, 59 CCPA ___, 454 F.2d 746, 172 USPQ 391 (1972); In re Brower, 58 CCPA 724, 433 F.2d 813, 167 USPQ 684 (1970). The examiner's and board's refusal to accord appellant the benefit of the filing date of his 1947 application was premised on their finding that the invention now claimed was not "disclosed" in, or "supported" by, the 1947 disclosure. Translated in terms of a first paragraph, § 112, requirement, it is evident that the Patent Office holding was that there was no *description* of the invention now claimed in the earlier specification. See Martin v. Johnson, supra; In re Lukach, 58 CCPA 1233, 442 F.2d 967, 169 USPQ 795 (1971).

In re Risse, supra, relied upon by appellant, involved, inter alia, the question of "support" for a claimed subgenus in the disclosure of a parent application. The court did not speak in terms of the description requirement of § 112, and it is since Risse that this court has focused on the express language of the statute. The recent cases suggest a more stringent requirement for a description of the claimed invention than may have been previously applied in cases wherein the issue was framed in terms of "support" for claimed subject matter. Compare Martin v. Johnson, supra; Fields v. Conover, 58 CCPA 1366, 443 F.2d 1386, 170 USPQ 276 (1971); In re Lukach, supra; In re DiLeone, 58 CCPA 934, 436 F.2d 1033, 168 USPQ 598 (1971); In re DiLeone and Lucas, 58 CCPA 925, 436 F.2d 1404, 168 USPQ 592 (1971); In re Ahlbrecht, 58 CCPA 848, 435 F.2d 908, 168 USPQ 293 (1971); with Risse, supra; In re Grimme, 47 CCPA 785, 274 F.2d 949, 124 USPQ 499 (1960). Doubt as to the continuing vitality of Risse in light of the subsequent "description requirement" cases has already been cast in Lukach and Fields v. Conover.

In distinguishing In re Fried, 50 CCPA 954, 312 F.2d 930, 136 USPQ 429 (1963), and Watson v. Bersworth, 251 F.2d 898, 116 USPQ 79 (D.C. Cir. 1958), this court in Risse said:

> The critical distinction is that in the Fried and Watson v. Bersworth cases, each of the applicants was attempting to claim a subgenus not specifically disclosed as such in the parent case, which contained only generic disclosure but no description of a single species within the scope of the later claimed subgenus. It is difficult to arrive at such a subgenus by a purely deductive approach, selecting appropriate variables from the generic disclosure. On the other hand, one may more easily reach such a subgenus by proceeding toward it from two opposite directions, i.e., by an inductive approach from a specifically disclosed species within the subgenus, as well as the deductive approach from the generic disclosure. The latter situation is represented by the facts of this case as well as Grimme. In both cases the subgeneric claims of the continuation-in-part applications (1) are completely within the scope of the parent case generic disclosure and (2) read on at least one species disclosed in a working example of the parent application.[10]

[2] From this passage emerges the rule relied upon by appellant to the effect that the disclosure of a genus and a species of a subgenus is a sufficient description of the subgenus. We do not now feel that such a rule is consonant with either the letter or spirit of the description requirement of § 112.

Precisely how close the description must come to comply with § 112 must be left to case-by-case development. However, the rule extracted from Risse is much too broad. Whatever may be the viability of an inductive-deductive approach to arriving at a claimed subgenus, it cannot be said that such a subgenus is necessarily always implicitly described by a genus encompassing it and a species upon which it reads. Unfortunately, Risse has been interpreted as so saying, and to put the proposition to rest, we overrule Risse to the extent that it provides the aforementioned "rule" for the satisfaction of the description requirement of the first paragraph of § 112.

[3] Appellant apparently perceives an anomaly resulting from the failure to follow Risse when he contends that had he simply drawn his claims more broadly, he would have satisfied the requirements of § 112. However, even assuming that broader claims would have descriptive support, it does not follow that such claims would be otherwise patentable. Section 112 itself imposes several conditions on the disclosure and claims, and the pertinence of the three prerequisites to patentability of a given claimed invention—utility, novelty and nonobviousness—may well depend upon its breadth. We see nothing inherently wrong with a particular principle of patentability which under certain circumstances operates to defeat the patentability of a narrow, but not a broader, claim, and, ordinarily, the mere fact that under such a principle a broader claim would pass muster is not a basis for adjusting the principle to render the narrower claim patentable.[11] We will not at-

[10] 54 CCPA at 1500, 378 F.2d at 952, 154 USPQ at 5.

[11] But see In re Stryker, 58 CCPA 797, 435 F.2d 1340, 168 USPQ 372 (1971).

tempt to anticipate the patentability of claims different in scope from those on appeal as a step antecedent to deciding a particular issue as applied to the particular claims before us.

Without the Risse doctrine, appellant has no basis on which the disclosure in the 1947 application may be treated as a description of the subject matter now claimed. The situation resembles that in Ahlbrecht wherein the subgenus sought to be patented was actually an extension of the only subgenus specifically described in the prior application. In Ahlbrecht, we held that the parent disclosure of fluorinated esters having "m" number of CH_2 groups, wherein "m" was disclosed as an integer from 3 to 12, was not a legally sufficient description of subsequently claimed esters wherein "m" was an integer from 2 to 12. Hence, even accepting the thrust of appellant's contention to the effect that the subgenus of pigment coating compounds now claimed encompasses compounds that were disclosed in the 1947 application, we nevertheless find ourselves in agreement with the board and the solicitor that the claimed subgenus of coating compounds with at least 8 carbon atoms was not adequately described in the earlier application which disclosed compounds with at least 12 carbons.

Since the 1947 application does not describe the claimed subject matter in the contemplation of § 112, first paragraph, appellant is not entitled to the § 120 benefit of the filing date of that earlier application. Accordingly, Iliff stands as a § 102 (b) statutory bar available for consideration along with other prior art in the determination of obviousness under 35 U.S.C. 103, and appellant may not, by Rule 131 affidavit, overcome it.

II. *Obviousness of the Composition*

The board held that it would have been obvious to substitute Baldwin's coated pigment for the coated pigment disclosed by Iliff. Appellant asserts that such a substitution would not have been obvious since Baldwin is concerned with oil base paints whereas Iliff involves water base paints. The essence of the argument would appear to be that the two environments are so dissimilar that one of ordinary skill in the art would not extract from *Baldwin a teaching applicable to water emulsion* paints.

The solicitor stresses that Iliff recognized the problem of low gloss value in emulsion paints, its source in the tendency of pigments to migrate from the oil to the water phase, and the conceptual solution of coating the pigment to impart organophilic properties. The solicitor points to the invitation in Iliff to use other treatments than that disclosed, which comprises applying an inorganic coating, and concludes that there is ample suggestion to employ the Baldwin coating which is taught to yield glossier paints.

We agree with the conclusion of the board and the solicitor's reasoning. In Iliff, we find a recognition of the problem faced by appellant and its general solution. Iliff appreciated that treatments other than coating with an inorganic material would be suitable. Baldwin discloses such an alternative treatment, and we believe that given the direction provided in Iliff, one of ordinary skill in the art would be led to employ Baldwin's coatings in lieu of Iliff's. As taught by both Iliff and Baldwin, the use of such coated pigments would yield glossier paints, the result contemplated by appellant.

We affirm the rejection of composition claims 1 and 2 under 35 U.S.C. 103.

III. *Obviousness of the Method*

The board regarded the sole difference between Cassel and the presently claimed process to be the pigment-coating step. Having concluded that coating a pigment with the organic compound claimed would have been obvious from Iliff and Baldwin, the board considered the claimed method obvious. Appellant argued before the board that the affidavit of Willis demonstrated that the results of the claimed process are superior to those achieved by Cassel. Specifically, affiant compared the gloss of a coating of an emulsion prepared by the method described in example 3 of the Cassel patent to that of a coating of an emulsion prepared by the claimed process and found the former to be much poorer. The board did not regard the Willis affidavit to be persuasive of nonobviousness saying:

> Appellant refers to the Willis affidavit filed October 23, 1967, in which Example 3 of Cassel * * * was duplicated and allegedly did not produce appellant's result of a glossy coat. However, it appears from the affidavit that the Cassel method did produce a water-continuous emulsion by inverting an oil-continuous emulsion prepared by flushing an aqueous pigment dispersion into an oil vehicle; i.e., except for the specific pigment-coating step, Cassel shows the manipulative steps of claim 12.

Before this court, appellant notes that his specification states that "[i]nitially to disperse a pigment in water that one desires to be dispersed in oil is a novel concept which would not be done deliberately to bring a pigment into an oil phase," and urges that Cassel fails to suggest this discovery. The solicitor contends that Cassel does add a pigment directly to water and that one having an organophilic

coated pigment such as Baldwin's would use the Cassel method expecting that because of its increased affinity for oil and decreased affinity for water, the coated pigment would ultimately end up in the oil phase.

We think the Patent Office has made out a strong prima facie case of obviousness of the claimed method. It appears that in terms of a sequence of manipulative steps, Cassel discloses the method herein claimed. Although Cassel utilizes an untreated pigment, we agree that the substitution of the coated pigment taught by Iliff and Baldwin therefor would be prima facie obvious.

The Willis affidavit does not provide a persuasive rebuttal of the prima facie case. While appellant interprets the affidavit showing as proof that Cassel's method fails to yield a glossy emulsion, the comparison would appear to turn on the difference in the pigments employed. It is expected from the disclosures in Iliff and Baldwin that a coated pigment will produce a glossy emulsion whereas an untreated pigment will not. In short, the proven distinction between the Cassel disclosure and the claimed method is only the expected one, and as such, it is not persuasive of nonobviousness. We accordingly affirm the rejection of claims 12 through 18, 20 and 21.

The decision of the board sustaining the rejection of all the claims here on appeal is *affirmed.*

Court of Customs and Patent Appeals

In re BROWN AND SAFFER

No. 8621 Decided May 18, 1972

PATENTS

1. Court of Customs and Patent Appeals — Briefs (§28.05)

Court does not consider specific references cited in solicitor's brief since these references were not relied on in rejection at bar.

2. Claims — Article defined by process of manufacture (§20.15)

Patentability — Subject matter for patent monopoly — Process, product and apparatus (§51.613)

In order to be patentable, product must be novel, useful, and unobvious; this is true whether product is claimed by describing it or by listing process steps used to obtain it; this latter type of claim, called a product-by-process claim, does not inherently conflict with second paragraph of 35 U.S.C. 112; that method of claiming is acceptable so long as claims particularly point out and distinctly claim product or genus of products for which protection is sought and satisfy other requirements of statute; however, lack of physical description in product-by-process claim makes determination of patentability more difficult, since it is patentability of product claimed and not of recited process steps which must be established; therefore, when prior art discloses a product which reasonably appears to be identical with or only slightly different than product claimed in product-by-process claim, a rejection based on sections 102 or 103 is fair; Patent Office is not equipped to manufacture products by myriad of processes put before it and then obtain prior art products and make physical comparisons therewith.

Particular patents—Catalyst

Brown and Saffer, Ethylene Oxidation Catalyst, claims 7 to 14 of application allowed; claims 15 to 19 refused.

Appeal from Board of Appeals of the Patent Office.

Application for patent of David Brown and Alfred Saffer, Serial No. 612,731, filed Jan. 30, 1967; Patent Office Group 113. From decision rejecting claims 7 to 19, applicants appeal. Affirmed as to claims 15 to 19; reversed as to claims 7 to 14.

WILLIAM C. LONG and DAVID DICK, both of New York, N. Y., for appellants.

S. WM. COCHRAN (FRED W. SHERLING of counsel) for Commissioner of Patents.

Before RICH, ALMOND, BALDWIN, and LANE, Associate Judges, and RAO, Judge, United States Customs Court, sitting by designation.

BALDWIN, Judge.

This appeal is from the decision of the Patent Office Board of Appeals affirming the examiner's rejection of claims 7-19 in appellant's application.[1] No claims have been allowed.

The Invention

The invention relates to catalysts for vapor phase partial oxidation of ethylene to ethylene oxide. Claims 7 and 15, the only independent claims in the case, read as follows:

[1] Application Serial No. 612,731, filed January 30, 1967.